AMENDMENTS TO THE SPECIFICATION:

Please insert the following heading before the paragraph beginning on page 1, line 2:

Background Of The Invention

(1) Field of the Invention

Please insert the following heading before the paragraph beginning on page 1, line 10:

(2) Description of the Art

Please insert the following heading before the paragraph beginning on page 5, line 11:

Summary Of The Invention

Please insert the following heading before the paragraph beginning on page 6, line 26:

Description Of The Figures

Please insert the following heading before the paragraph beginning on page 7, line 23:

Detailed Description Of The Invention

Please amend the paragraph on page 15, beginning at line ~~25~~ 18 as follows: CE 7/3/08

As before, two input signal vectors **A** and **B**, having respective amplitudes Va and Vb, at inputs 102a and 102b are split into signal fractions a1.**A**, a2.**A**, a3.**A** and b1.**B**, b2.**B**, b3.**B** by splitters 106a and 106b and fed to first and second inputs 1 and 2 of first, second and third hybrids 110 to 114: i.e. signals ~~a[n].A and b[n].B~~ a[n + 1]**A** + b[n + 1]**B** are input to nth hybrid 110 + 2n, n = 0, 1 and 2. The splitting ratios are set so that a1 = b1, a2 = b2 and a3 = b3 in order to implement phase to power conversion in the hybrids 110 to 114.

Amendment

10577206

CE 7/3/08

Please amend Table 1 on page 16, beginning at line ~~18~~ 24 as follows:

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Table 1

Hybrid	Input	Fraction		Hybrid	Input	Fraction
144_4	1	c1.(a1.**A** + b1.**B**)		144_7	1	e2.(a2.**A** + b2.**B**)
144_4	2	d1.(a~~3~~1.**A** – b~~3~~1.**B**)		144_7	2	f2.(a2.**A** - b2.**B**)
144_5	1	c2.(a1.**A** + b1.**B**)		144_8	1	g1.(a3.**A** + b3.**B**)
144_5	2	d2.(a~~3~~1.**A** – b~~3~~1.**B**)		144_8	2	h1.(a~~1~~3.**A** – b~~1~~3.**B**)
144_6	1	e1.(a2.**A** + b2.**B**)		144_9	1	g2.(a3.**A** + b3.**B**)
144_6	2	f1.(a2.**A** – b2.**B**)		144_9	2	h2.(a~~1~~3.**A** – b~~1~~3.**B**)

Please amend the paragraph on page 17, beginning at line 25 as follows:

Table 2 below shows output signals from the hybrids 144_4 to 144_9. The splitter fractions c1 etc. are necessary scalar quantities, but terms in parenthesis in Table 2 column 4, e.g. (a1**A** + b1.**B**) and (a~~3~~1.**A** – b~~3~~1.**B**), are vector additions and subtractions. The phase difference is imposed between Va and Vb as described earlier with reference to Figure 3 or 4, and vectors are indicated by characters in bold type. Moreover, as previously described, resultants of vector additions (a1.**A** + b1.**B**), etc, between signals or equal magnitude are all in phase with one another, and differ in phase by 90 degrees to all vector subtractions (a~~3~~1.**A** – b~~3~~1.**B**) etc. The vector subtractions are therefore all automatically in quadrature with the vector additions.

Please amend the Table 2 on page 18 as follows:

Table 2

Antenna Element	Hybrid	Output	Output Signal
148U6	144_4	Sum	c1.(a1.**A** + b1.**B**) + d1.(a~~3~~1.**A** – b~~3~~1.**B**)
148U5	144_5	Sum	c2.(a1.**A** + b1.**B**) + d2.(a~~3~~1.**A** – b~~3~~1.**B**)
148U4	144_6	Sum	e1.(a2.**A** + b2.**B**) + f1.(a1.**A** – b2.**B**)

148U3	144_7	Sum	e2.(a2.**A** + b2.**B**) + f2.(a2.**A** – b2.**B**)
148U2	144_8	Sum	g1.(a3.**A** + b3.**B**) + h1.(a~~1~~3.**A** – b~~1~~3.**B**)
148U1	144_9	Sum	g2.(a2.**A** + b3.**B**) + h2.(a~~1~~3.**A** – b~~1~~3.**B**)
148L1	144_9	Diff.	g2.(a3.**A** + b3.**B**) - h2.(a~~1~~3.**A** – b~~1~~3.**B**)
148L2	144_8	Diff.	g1.(a3.**A** + b3.**B**) - h1.(a~~1~~3.**A** – b~~1~~3.**B**)
148L3	144_7	Diff.	e2.(a2.**A** + b2.**B**) - f2.(a2.**A** – b2.**B**)
148L4	144_6	Diff.	e1.(a2.**A** + b2.**B**) - f1.(a2.**A** – b2.**B**)
148L5	144_5	Diff.	c2.(a1.**A** + b1.**B**) – d2.(a~~3~~1.**A** – b~~3~~1.**B**)
148L6	144_4	Diff.	c1.(a1.**A** + b1.**B**) - d1.(a~~3~~1.**A** – b~~3~~1.**B**)

Please amend the paragraph on page 18, beginning at line 3 as follows:

The expressions in the fourth column of Table 2 are of the form **P** + **Q**, where **Q** is a vector in quadrature with a vector **P**. All **P** vectors are in phase with one another and all **Q** vectors are in phase with one another. They can therefore be written as P + jQ, where P and Q are scalar magnitudes of **P** and **Q**. E.g. for antenna element 148U6:

$\boldsymbol{P}$ = e~~2~~c1.(a1.**A** + b1.**B**) and $\boldsymbol{Q}$ = d1.(a~~3~~1.**A** – b~~3~~1.**B**)

Please amend the Table 3 on page ~~18~~ 19 as follows: CE 7/3/08

Table 3

Splitter	Splitter Output	Split Ratio	
102a	a1	~~0.2500~~ 0.2286	~~-9.5dB~~ -12.8dB
	a2	~~0.5000~~ 0.7873	~~-7.20dB~~ -2.1B
	a3	~~1.0000~~ 0.5725	~~-1.18dB~~ -4.8dB
102b	b1	~~0.2500~~ 0.5725	~~-9.5dB~~ -4.8dB
	b2	~~0.5000~~ 0.7873	~~-7.20dB~~ -2.1dB
	b3	~~1.0000~~ 0.2286	~~-1.18dB~~ -12.8dB